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TESTIMONY OF
JERROLD E. CHAPDELAINÉ

FILED ON BEHALF OF
THE STAFF OF THE FLORIDA PUBLIC SERVICE COMMISSION

FILED: OCTOBER 12, 1992

DOCKET NO. 920199-WS - APPLICATION FOR A RATE INCREASE BY
SOUTHERN STATES UTILITIES, INC.

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1 DIRECT TESTIMONY OF JERROLD E. CHAPDELAINÉ

2 Q. WOULD YOU PLEASE STATE YOUR NAME AND ADDRESS?

3 A. Jerrold E. Chapdelaine, 101 East Gaines Street, Tallahassee, Florida
4 32399-0873.

5 Q. BY WHOM ARE YOU EMPLOYED?

6 A. The Florida Public Service Commission.

7 Q. HOW LONG HAVE YOU BEEN SO EMPLOYED?

8 A. For approximately 14 years.

9 Q. WOULD YOU STATE YOUR EDUCATIONAL BACKGROUND?

10 A. I received a Bachelor in Mathematics with major studies in Electrical
11 Engineering and Naval Science from the University of Minnesota (1954), a
12 Bachelor in Accounting from the University of West Florida (1978), and a
13 Master of Business Administration from Florida Atlantic University (1977).
14 I am a graduate of the United States Naval Test Pilot School with major
15 studies in Aeronautical and Flight Test Engineering (1961). During my
16 employment with the Florida Public Service Commission I have served as an
17 Accounting (Regulatory) Analyst, Management Analyst, Management Review
18 Specialist, and Engineer IV. My current duties are as a Utility
19 Systems/Communication Engineer. I am a Certified Internal Auditor and a Class
20 B Practitioner before the Florida Public Service Commission.

21 Q. WOULD YOU EXPLAIN WHAT YOUR GENERAL RESPONSIBILITIES ARE AS A UTILITY
22 SYSTEMS/COMMUNICATION ENGINEER?

23 A. My general responsibilities include review and analyses of complex system
24 designs associated with certification of jurisdictional investor owned utility
25 systems, frequent interaction with other governmental agencies involved in

1 | regulation of water and wastewater utilities, making recommendations
2 | concerning water source development, water treatment and delivery of potable
3 | water, wastewater collection and pumping, and treatment and disposal of
4 | wastewater, conducting plant site evaluations and inspections, conducting cost
5 | studies of plant systems, handling customer complaints, preparation of agenda
6 | recommendations for the Commissioners, preparation of testimony and testify
7 | on engineering and associated rate making matters at hearings, making
8 | presentations at customer service meetings, preparation of technical cross-
9 | examination questions for hearings and technical questions for deposition of
10 | witnesses, and staying abreast of the latest design criteria and standard
11 | engineering practices utilized in the utility industry for water and
12 | wastewater systems.

13 | Q. HAVE YOU EVER TESTIFIED AS AN EXPERT WITNESS?

14 | A. Yes. I have been accepted and testified as an expert witness in hearings
15 | which include Docket No. 820073-WS (Seacoast), Docket No. 830059-WS (Deltona-
16 | Spring Hill), Docket No. 840419-SU (Florida Cities Water Company), Docket No.
17 | 850100-WS (Du-Lay), Docket No. 850151-WS (Deltona-Marco Island), Docket No.
18 | 870981-WS (Miles Grant Water and Sewer Company), all before the Florida Public
19 | Service Commission, and Docket No. 881425-WS (St. Johns North Utility Corp.)
20 | before the Division of Administrative Hearings.

21 | Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY TODAY?

22 | A. The purpose of my testimony today is to describe and present the bases for
23 | Commission policy regarding used and useful adjustments incident to rate
24 | applications of water and wastewater utilities under Commission jurisdiction.

25 |

1 Q. WHY IS IT NECESSARY FOR USED AND USEFUL ADJUSTMENTS TO BE CONSIDERED IN
2 A RATE PROCEEDING?

3 A. Used and useful adjustments to the investment in plant in service
4 generally may be required when a utility is providing service in its territory
5 but does not utilize the full design capacity of the system due to the
6 connected load being less than that expected at build-out or design load.

7 Q. WHY IS THE ADJUSTMENT IMPORTANT IN A RATE PROCEEDING WHERE THE UTILITY IS
8 PROVIDING SERVICE AT LESS THAN ITS DESIGN SYSTEM LOAD?

9 A. The failure to make adjustments for utilization at less than full design
10 capacity would cause the customers being served to pay, through their service
11 rates, for plant capacity which should more properly be paid for by future
12 customers. Furthermore, if current customers pay, through service rates, for
13 plant which is not being utilized or furnished in their behalf, growth in
14 customers would result in the utility earning above its last authorized rate
15 of return on its rate base.

16 Q. WHAT CONCERNS MUST THE COMMISSION BALANCE IN DETERMINING AND ESTABLISHING
17 THE LEVEL OF ADJUSTMENTS TO USED AND USEFUL PLANT IN A RATE PROCEEDING?

18 A. The Commission must balance the fairness of the level of the investment
19 in plant that should be borne by the customers under a readiness to serve
20 concept with a degree of encouragement for the utility to make prudent
21 decisions and proper investment in plant necessary to serve its territory in
22 the context of effective long-range planning and least-cost design and
23 construction. On one hand, if the used and useful adjustment results in
24 excessive rate base relative to the test year customers, service rates will
25 be comparatively elevated and the potential for the utility to earn excess

1 returns during periods of growth will exist. Alternatively, if the used and
2 useful adjustment results in a rate base which is unfairly low, the utility
3 will have little incentive to employ effective long range planning and seek
4 economies of scale, the result being higher incremental costs and service
5 rates to future customers.

6 Q. WHAT CONSIDERATIONS ARE EMPLOYED IN THE DETERMINATION OF USED AND USEFUL
7 PLANT IN SERVICE?

8 A. A utility must recover its prudent investment costs incurred in satisfying
9 statutory requirements to provide safe, efficient and sufficient service to
10 its customers. The utility should be able to recover the cost of its
11 investment as well as earn a fair rate of return on the rate base used and
12 useful in serving its customers. A used and useful analyses would begin with
13 a determination of the hydraulic share of the plant used and useful in service
14 to the customers in the test year used for the rate application. Such a
15 beginning would consider only the connected load on the system under average
16 flow conditions. For instance, if the system provided one-half of its design
17 capacity to current customers, then it should have a 50% used and useful
18 adjustment applied. However, there are a number of other considerations which
19 should be taken into account in determining the final used and useful
20 adjustment.

21 Q. WHAT CONSIDERATIONS SHOULD BE TAKEN INTO ACCOUNT OVER AND ABOVE AN
22 HYDRAULIC SHARE BASIS?

23 A. Design and construction of the facility, as set forth in Chapter 17-555
24 and Chapter 17-600, Florida Administrative Code, are considered in the context
25 of sound engineering, standard industrial practices and regulatory

1 requirements. The prudence of the investment concerning source, treatment,
2 storage, transmission and distribution, collection and pumping, disposal,
3 economies of scale, growth rates, demand levels, customer mix, seasonal
4 effects, natural occurrences, demographics and topography are all taken into
5 account. Various maximum flows may be taken into account based on peak month,
6 peak day and peak hour demands to determine the highest level of capacity
7 which is indicated for the system based on the test year data which may be
8 adjusted for natural occurrences, line breaks and fire fighting. It is
9 Commission practice to utilize maximum daily production water flow based upon
10 the average of the five highest pumping rate days in the highest pumping rate
11 month. In the case of wastewater used and useful determinations, the
12 Commission utilizes average daily flow from the peak flow month.
13 Consideration may be given to the class of customer and the characteristics
14 of demand which the peak capacity situation indicates in cases where customer
15 class, such as an industrial entity, may have a bearing on the peak
16 requirement. A margin reserve is determined based upon growth characteristics
17 in the service area for periods of the past five years. Generally, the margin
18 reserve is designed to provide sufficient capacity for growth in the customer
19 base for a specific period into the future, usually up to 18 months for
20 treatment facilities and 12 months for distribution and collection systems or
21 up to 20% of the plant in service. Regulatory requirements such as redundancy
22 of equipment and the provision for adequate service and plant operation with
23 portions down for maintenance and repair are taken into account. Fire flow
24 is taken into account for the water system based on Insurance Services
25 Organization (ISO) and other governmental agency requirements depending on the

1 | type of service territory and customer mix. Fire flow requirements may range
2 | from a minimum of 500 gallons per minute (GPM) for two hours (60,000 gal.) to
3 | more than 1,500 GPM for 4 hours (360,000 gal.). Fire flow requirements can
4 | make a considerable difference in establishing used and useful adjustments,
5 | particularly in smaller systems. Unaccounted-for water is determined, and
6 | levels exceeding specific limits (10%) are investigated for possible
7 | adjustment to used and useful plant levels. Infiltration and inflow into the
8 | wastewater system are examined, and excessive amounts (above 10%) may effect
9 | the level of adjustment for used and useful plant.

10 | Q. WOULD YOU ADDRESS ASPECTS OF THE SOUTHERN STATES' FILING WHICH IMPACT UPON
11 | USED AND USEFUL ADJUSTMENTS AND WHICH ARE NOT BASED UPON STANDARD COMMISSION
12 | PRACTICE?

13 | A. Several adjustments in the filing were not done strictly in accordance
14 | with Commission practice regarding used and useful adjustments and no
15 | explanation or justification was found as to why deviations occurred. The
16 | utility made adjustments based upon a single peak day rather than the average
17 | of the peak five days mentioned previously in this testimony. The use of a
18 | single peak day makes it likely that an anomalous occurrence will result in
19 | an excessive used and useful level. The utility calculated hydro-pneumatic
20 | tank used and useful based upon a factor of 15 rather than a factor of 10
21 | relative to the well capacity as called for in the Ten State Standards
22 | (Recommended Standards for Water Works). The utility included fill-in lots
23 | in the distribution and collection systems used and useful adjustment rather
24 | than only lots which were or would be developed as is the basis pursuant to
25 | Commission practice. Commission policy with regard to contributions-in-aid-

1 of-construction (CIAC) calls for 100 % of the distribution and collection
2 systems to be contributed. Compliance with CIAC policy obviates used and
3 useful determinations involving distribution and collection systems.
4 Furthermore, non-used and useful plant should be accommodated through
5 recognition of an allowance-for-funds-prudently-invested (AFPI). Used and
6 useful determinations should be made based upon Commission practice and the
7 MFR requirements, all of which are known to utilities such as Southern States.
8 It is incumbent upon the utility to justify its filing, prove its case, and
9 indicate why it chose to deviate from Commission practice. Absent detailed
10 evidence justifying the utility's deviations from Commission practice in this
11 filing, the Commission should calculate used and useful in accordance with its
12 practice.

13 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY FOR THIS PROCEEDING?

14 A. Yes it does.

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